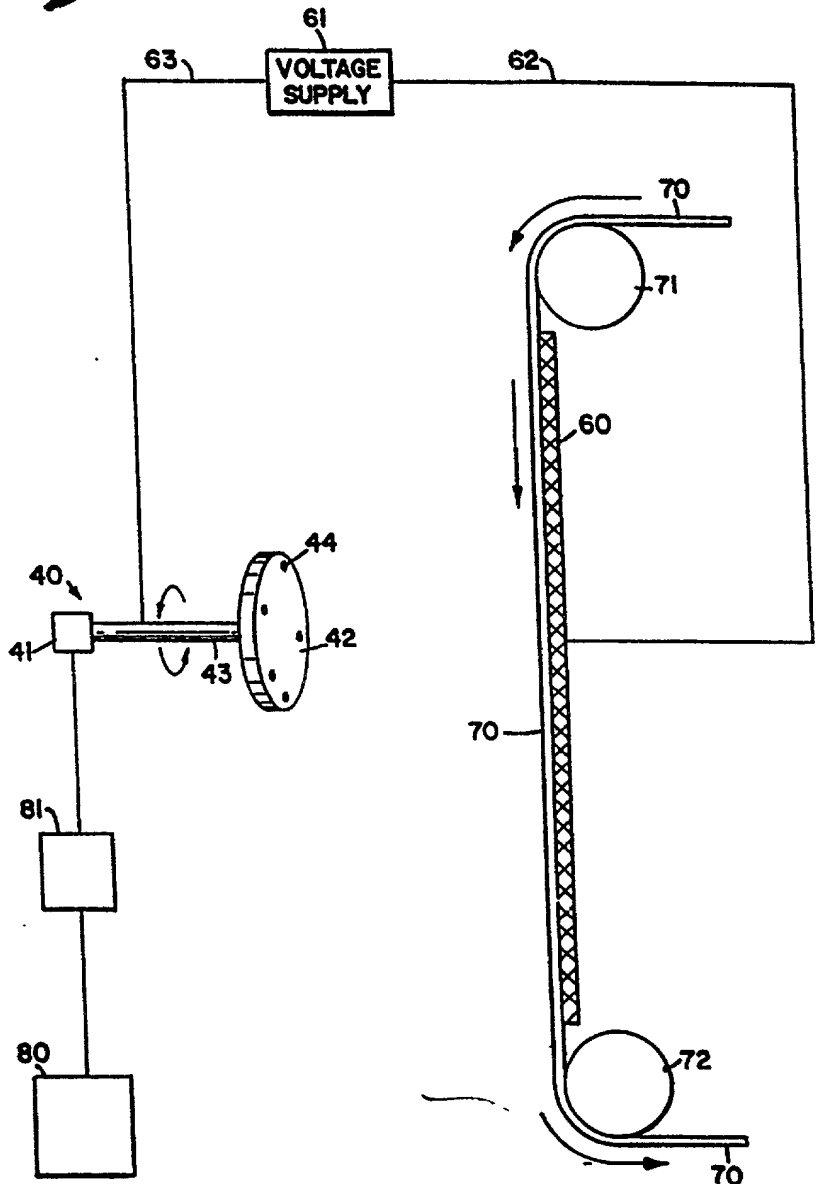


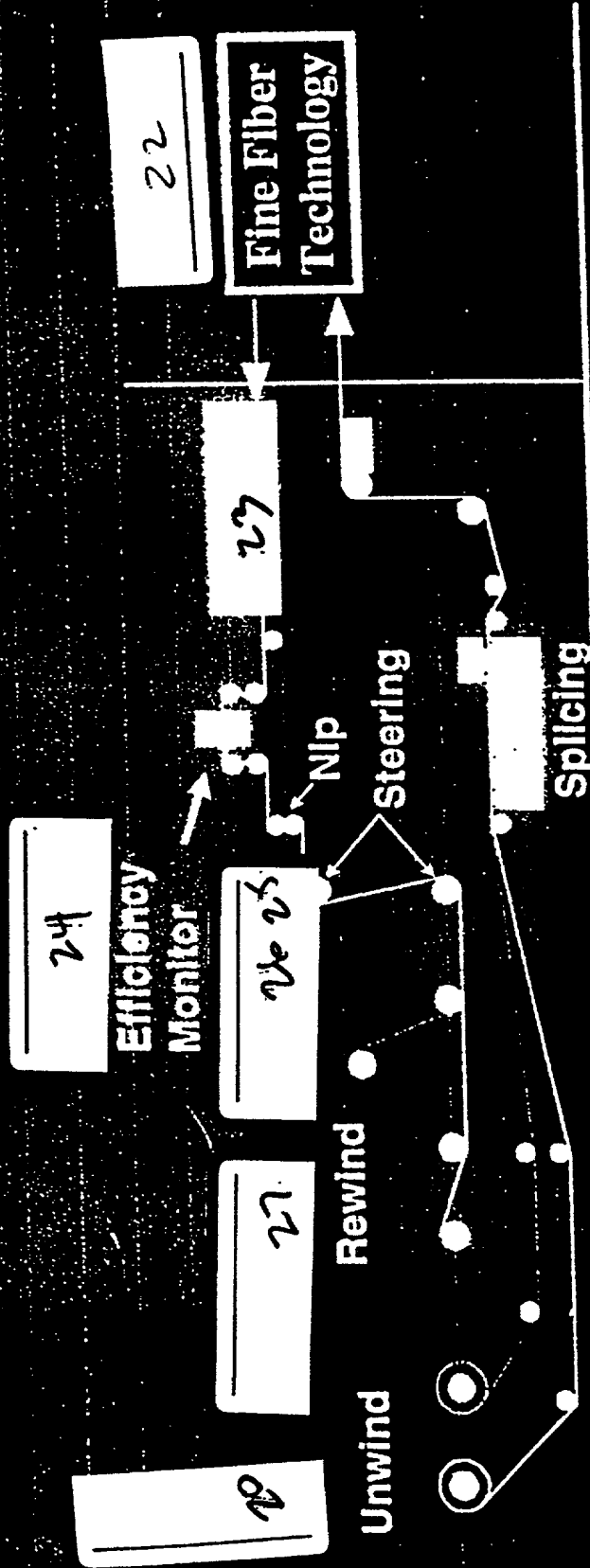
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FIG. 1



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Fine Fiber Technology



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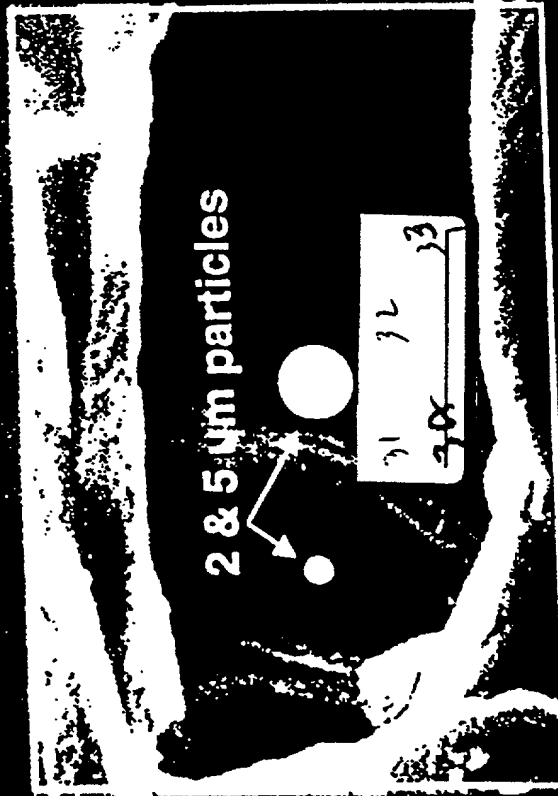
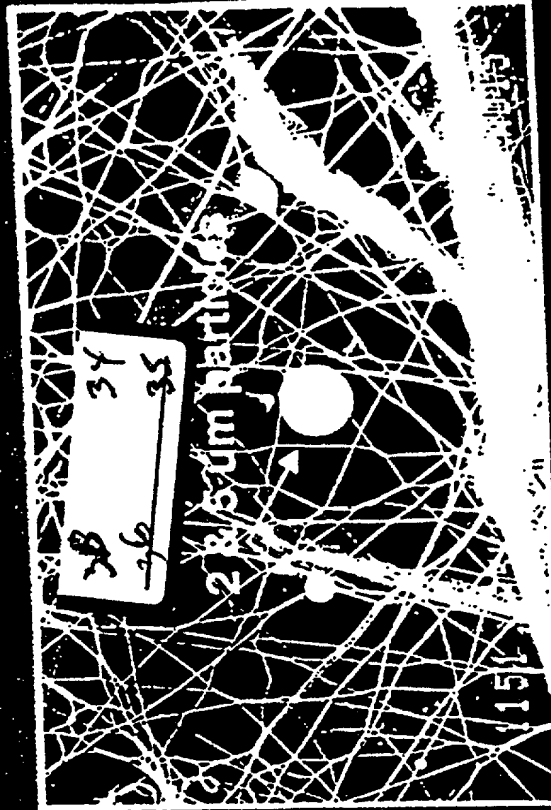
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Katz Analytical Services, Inc.
1191-20C-3, Sample #: 1, Angle: 65

XPS Multiplex

O 1s

EV/Step: 0.2 eV, Time/Step: 50 mSec, Sweeps: 12

Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV

Fig 4

ESCA O 1s Spectra for Sample As Span

6A

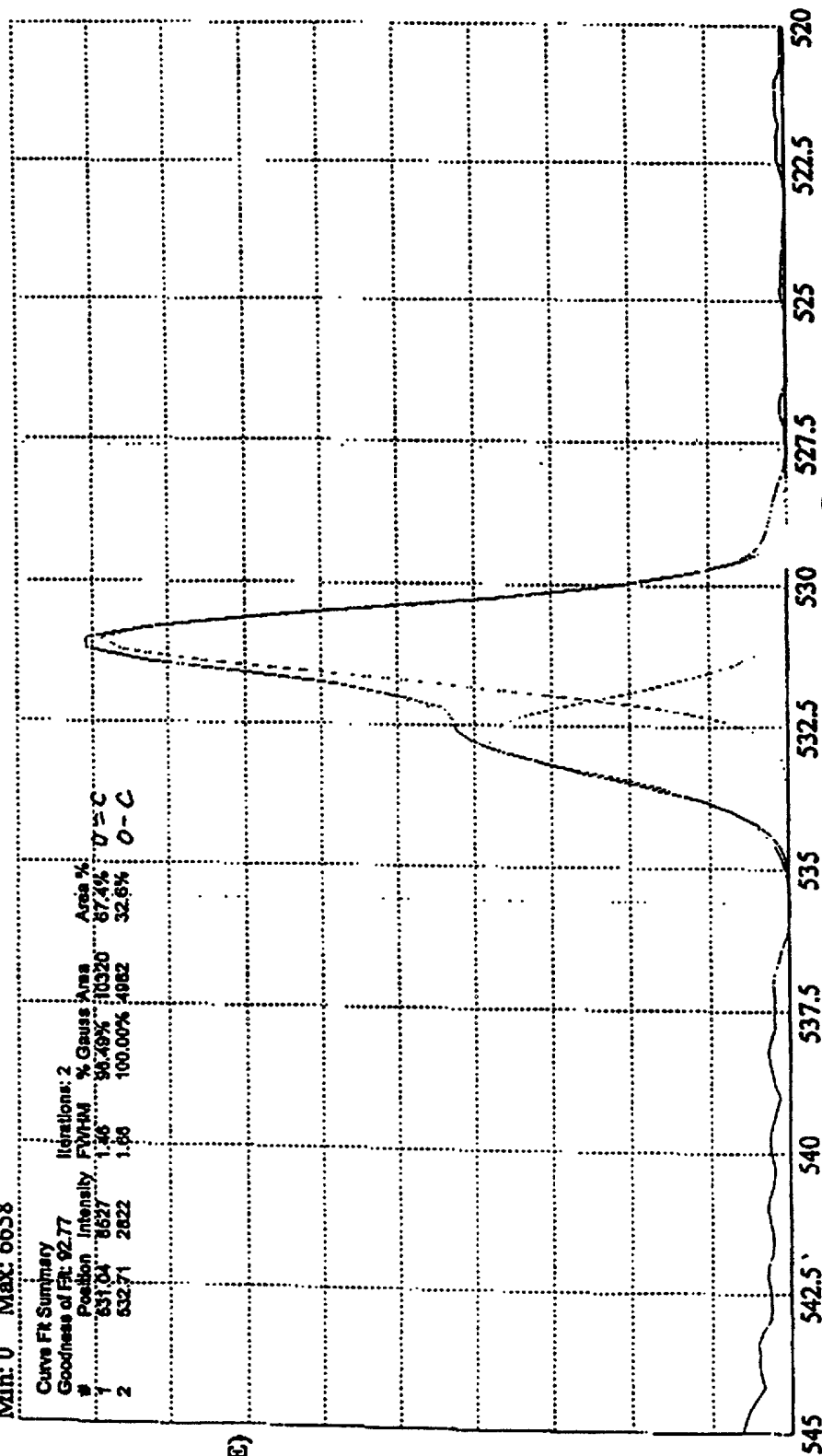
Min: 0 Max: 6658

Curve Fit Summary			
Goodness of Fit: 92.77			
#	Position	Intensity	Iterations: 2
1	531.04	8627	1.26
2	532.71	2822	1.66

% Gauss Area	Area %
90.49%	87.4%
100.00%	32.6%

O - C

N(E)



Binding Energy (eV)

File 4

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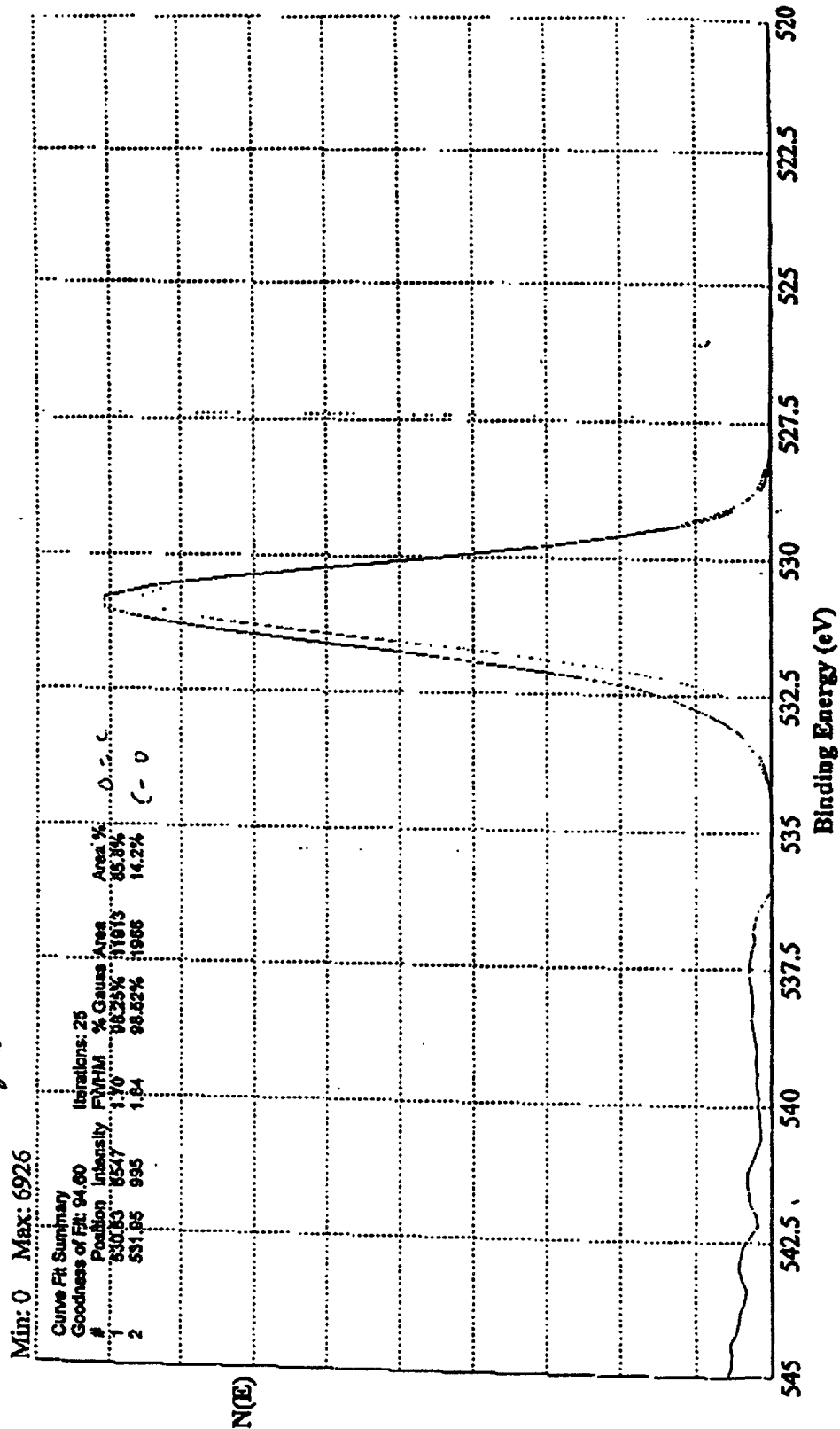
Katz Analytical Services, Inc.
1191-20C-4, Sample #: 1, Angle: 65

XPS Multiplex

O 1s

EV/Step: 0.2 eV, Time/Step: 50 mSec, Sweeps: 12
Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV

Fig 3 ESCA O 1s Spectra for Heat-Treated Sample 6A



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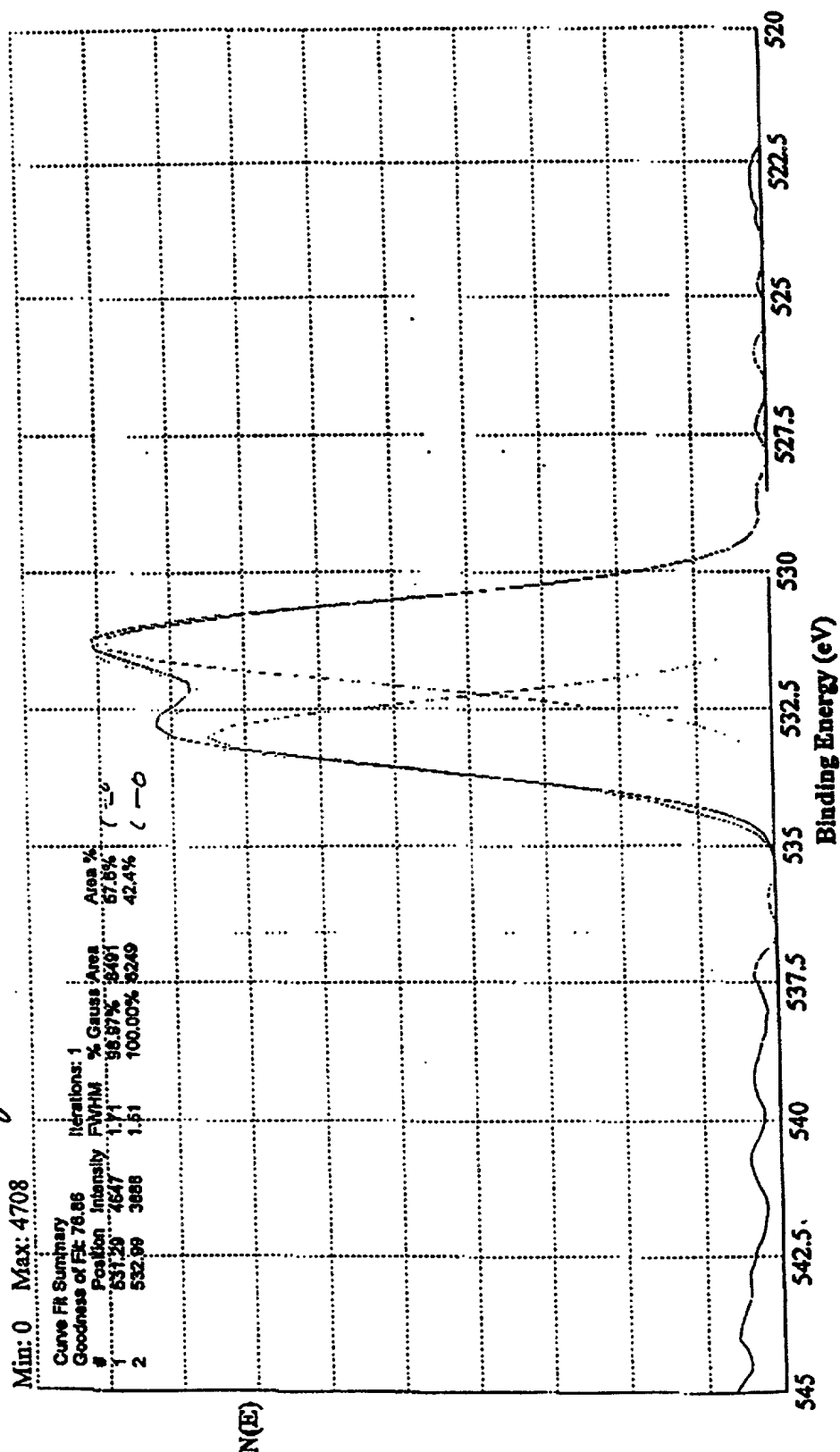
Katz Analytical Services, Inc.
1191-20C-5, Sample #: 1, Angle: 65

XPS Multiplex

O 1s

EV/Step: 0.2 eV, Time/Step: 50 mSec, Sweeps: 12
Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV

Fig. B, ESCA O 1s Spectra for As-Span Example



Katz Analytical Services, Inc.
1191-20C-6, Sample #: 1, Angle: 65

XPS Multiplex

019

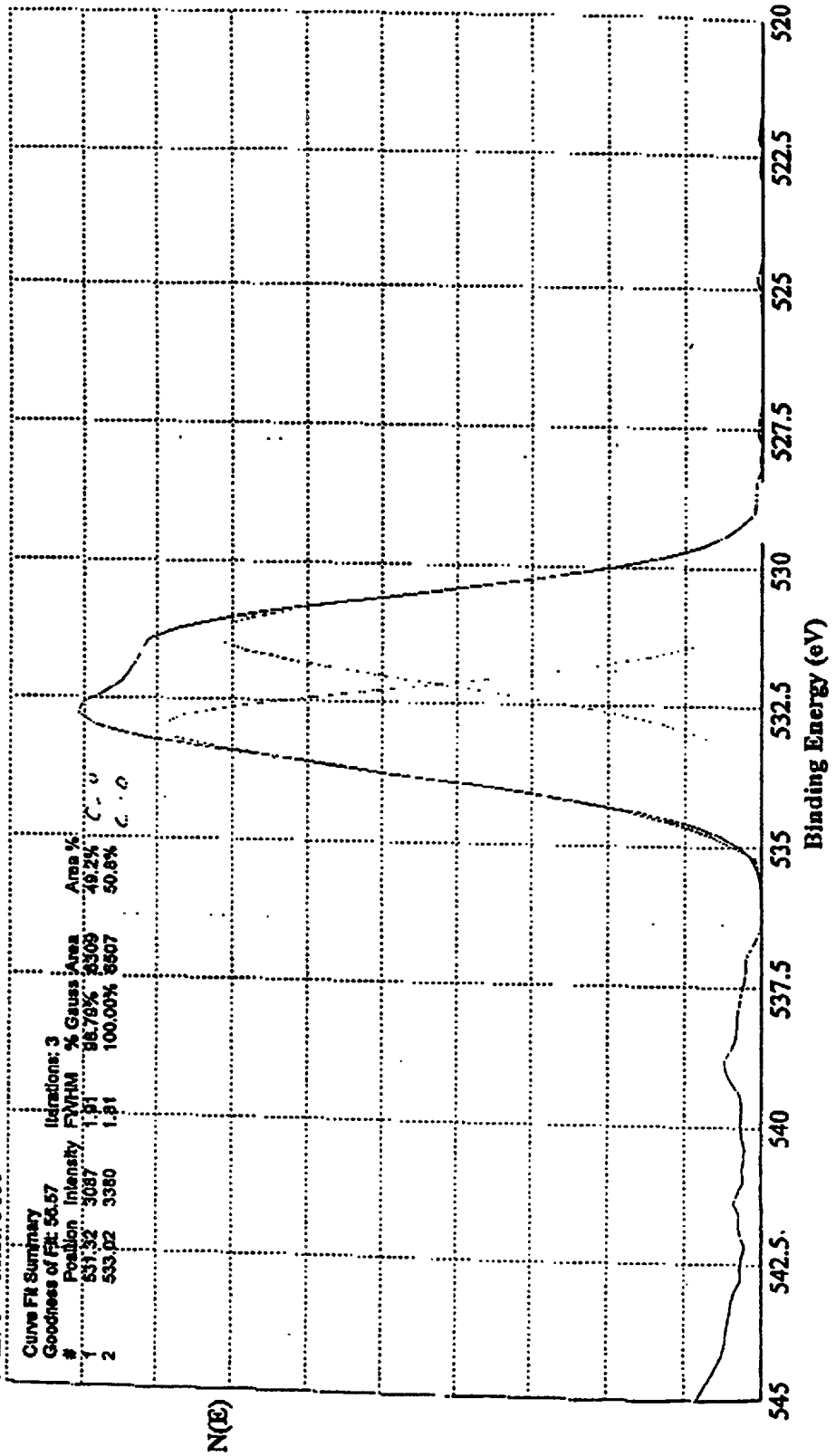
EV/Step: 0.2 eV, Time/Step: 50 mSec, Sweeps: 16

Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV

50 mSec, Sweeps: 16
5 eV, Work Function: 4.1 eV

Min: 0 Max: 3855

Curve Fit Summary					
Goodness of Fit: 50.57					
#	Position	Intensity	Iterations: %	Gauss Area	Area %
			FWHM		
1	531.32	3087	1.91	98.78% 3509	49.2%
2	533.02	3380	1.91	100.00% 3607	50.8%



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Katz Analytical Services, Inc.
1191-20C-3, Sample #: 1, Angle: 65

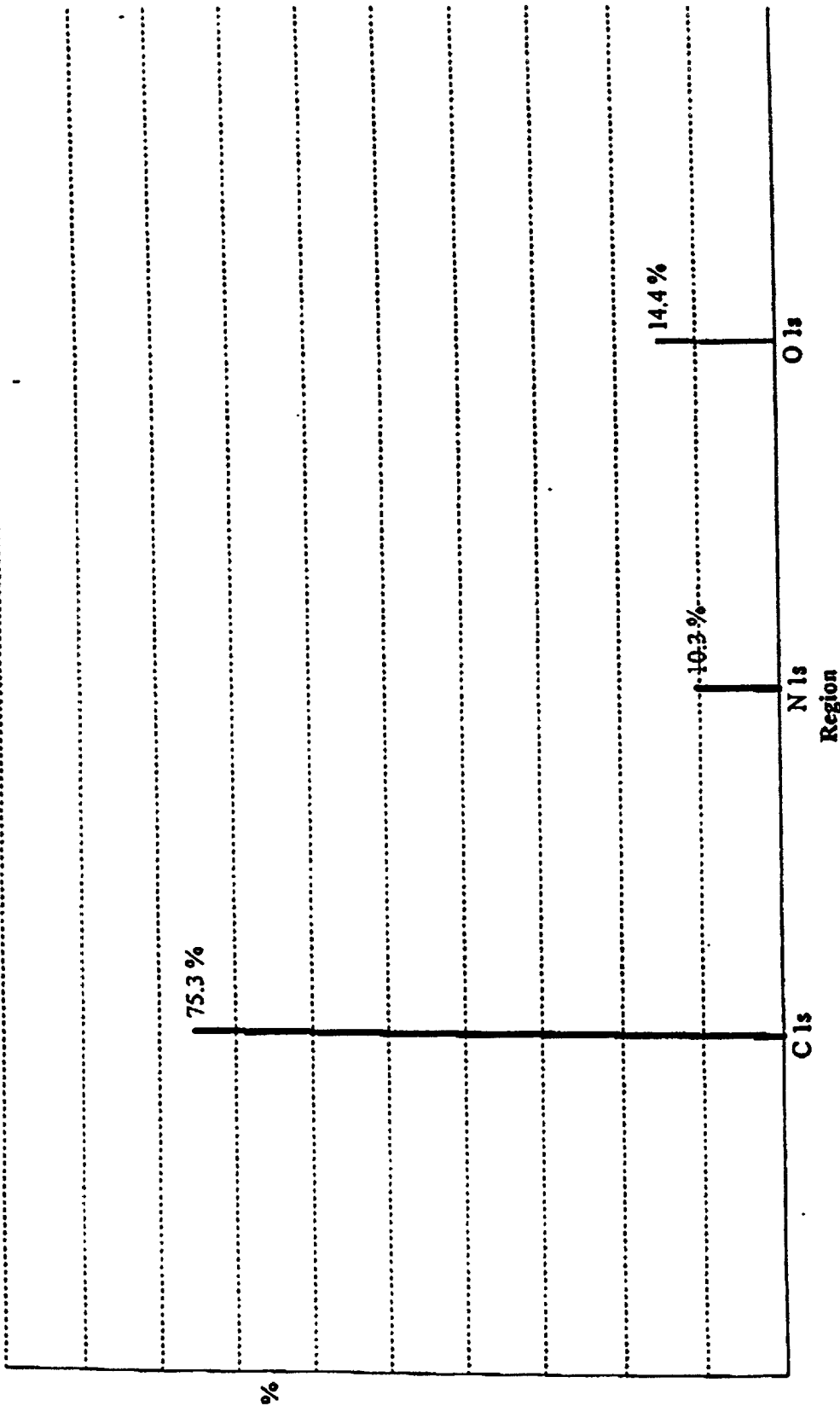
XPS Multiplex

Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV

Fig 8

ESCA Multiplex for As-spun Sample 6A

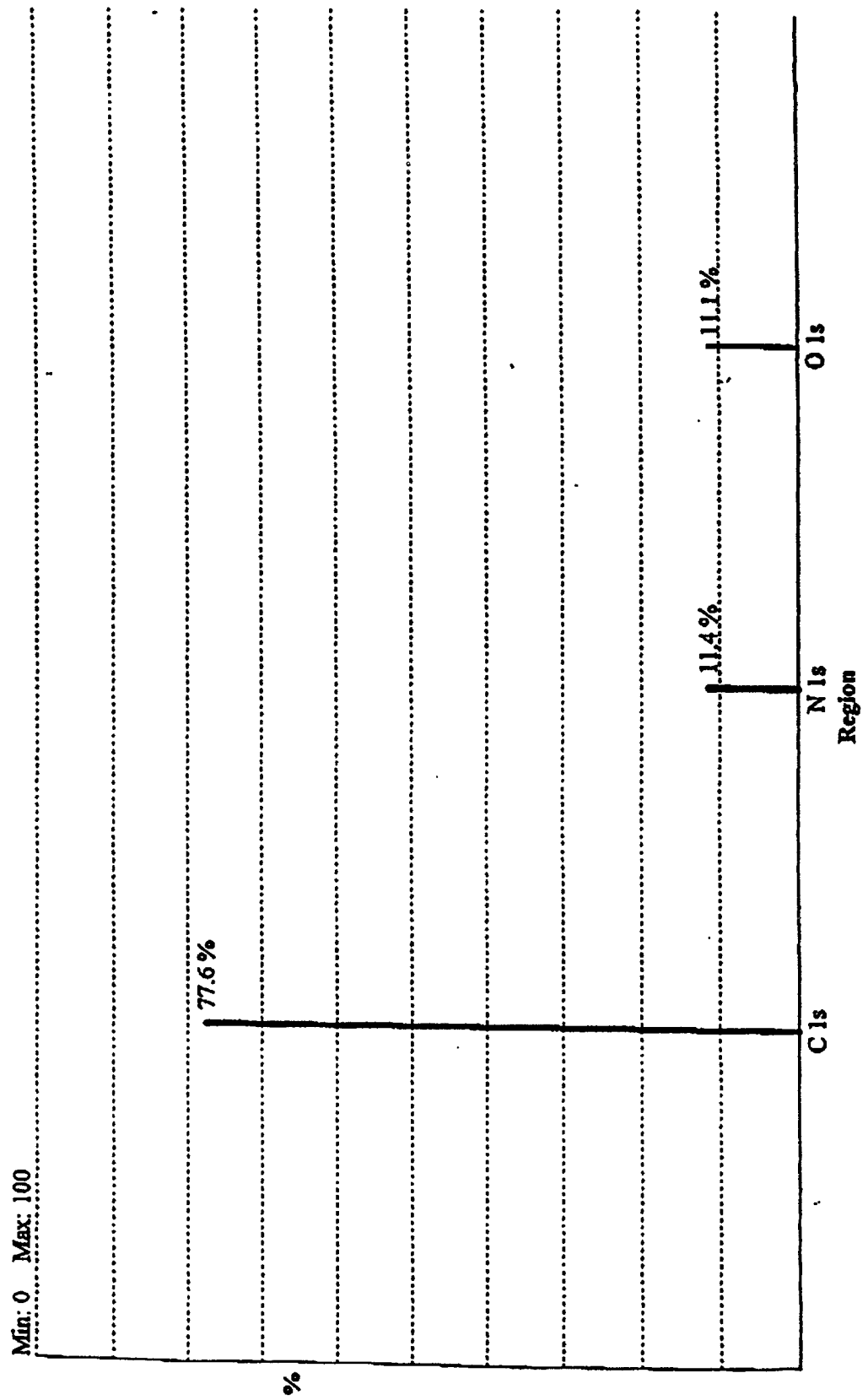
Min: 0 Max: 100



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Katz Analytical Services, Inc.
1191-20C-4, Sample #: 1, Angle: 65

XPS Multiplex
Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV
Fig 9. ESCA Multiplex for Heat Treated Sample 6A



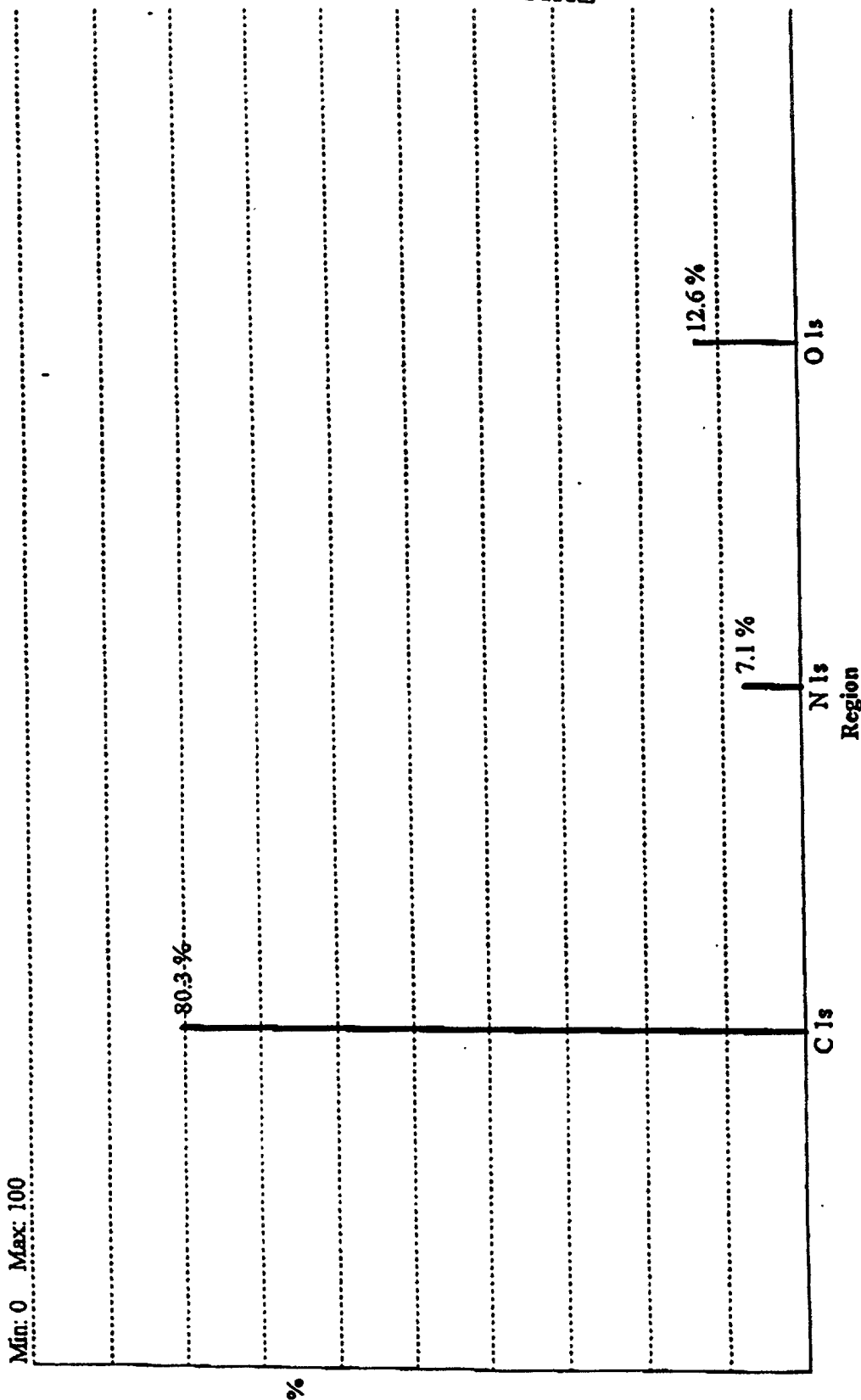
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Katz Analytical Services, Inc.
1191-20C-5, Sample #: 1, Angle: 65

XPS Multiplex

Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV

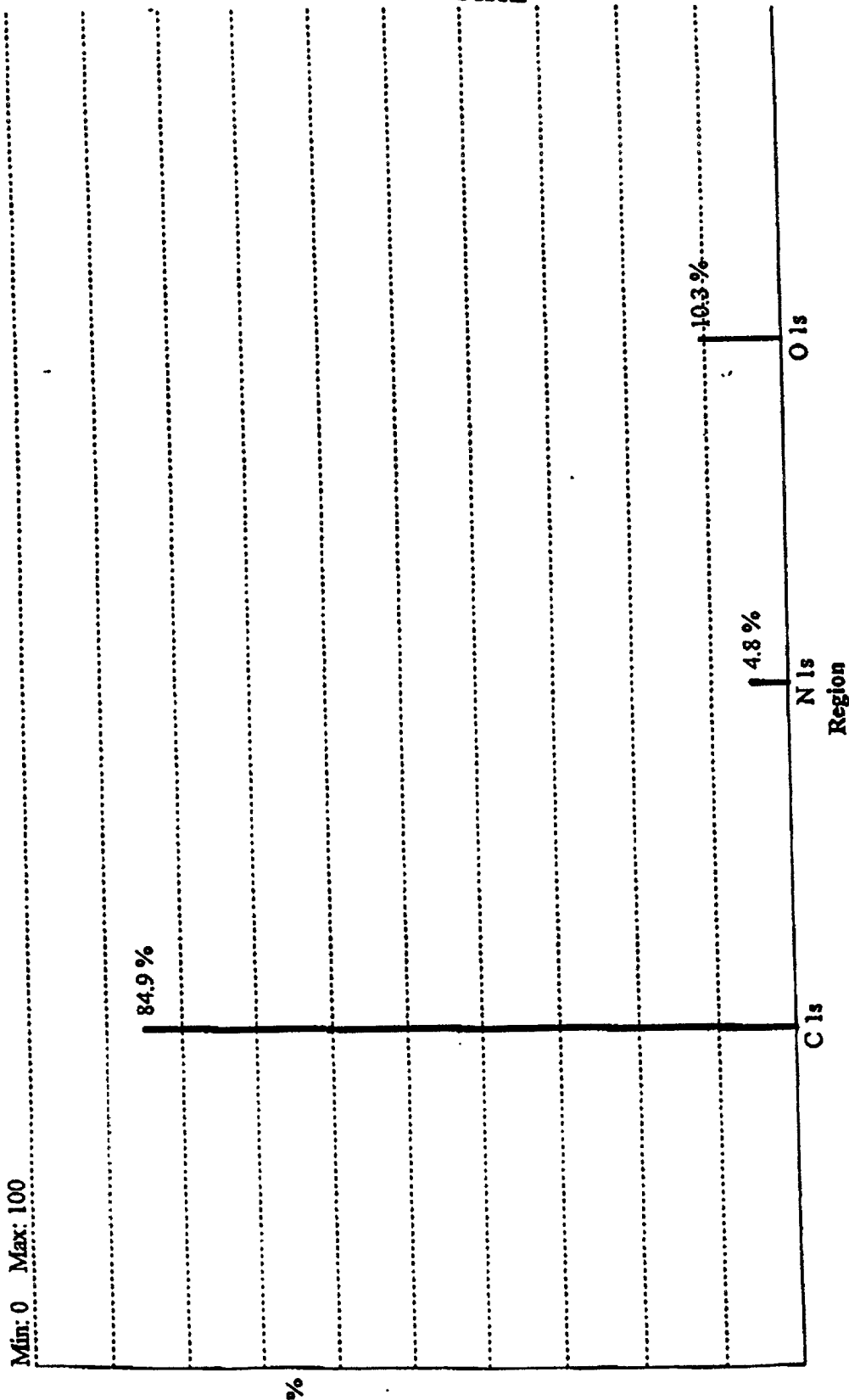
Fig 10 ESCA Multiplex for As-Spun Sample 16B



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Katz Analytical Services, Inc.
1191-20C-6, Sample #: 1, Angle: 65

XPS Multiplex
Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV
Fig 11 ESCA Multiplex for Heat-Treated Sample 6B



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... due to the breakage of smart or ... about their own ...

Ultra Web Long Sock

October 26, 1993

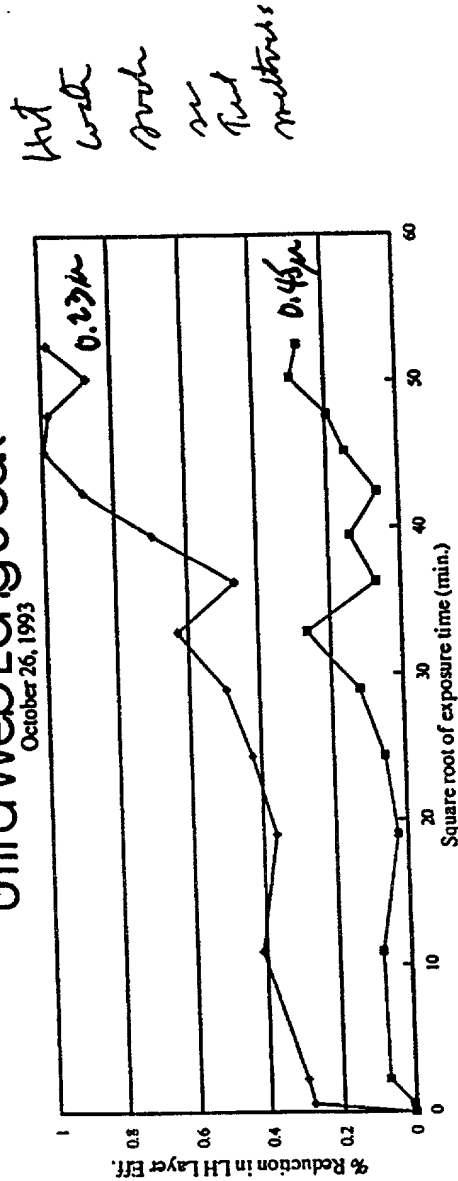
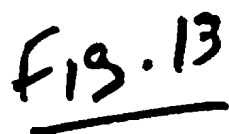


Fig 12

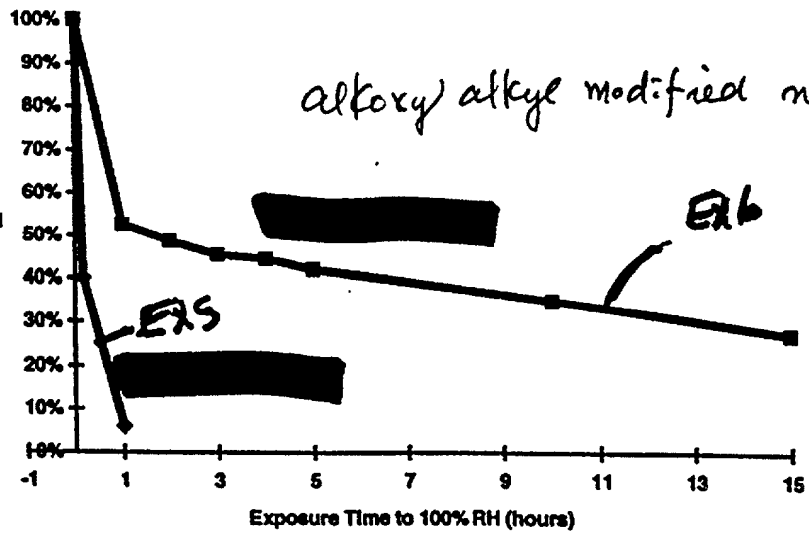
24. 0987 0986 0985 0984 0983 0982 0981 0980 0979 0978 0977 0976 0975 0974 0973 0972 0971 0970 0969 0968 0967 0966 0965 0964 0963 0962 0961 0960 0959 0958 0957 0956 0955 0954 0953 0952 0951 0950 0949 0948 0947 0946 0945 0944 0943 0942 0941 0940 0939 0938 0937 0936 0935 0934 0933 0932 0931 0930 0929 0928 0927 0926 0925 0924 0923 0922 0921 0920 0919 0918 0917 0916 0915 0914 0913 0912 0911 0910 0909 0908 0907 0906 0905 0904 0903 0902 0901 0900 0899 0898 0897 0896 0895 0894 0893 0892 0891 0890 0889 0888 0887 0886 0885 0884 0883 0882 0881 0880 0879 0878 0877 0876 0875 0874 0873 0872 0871 0870 0869 0868 0867 0866 0865 0864 0863 0862 0861 0860 0859 0858 0857 0856 0855 0854 0853 0852 0851 0850 0849 0848 0847 0846 0845 0844 0843 0842 0841 0840 0839 0838 0837 0836 0835 0834 0833 0832 0831 0830 0829 0828 0827 0826 0825 0824 0823 0822 0821 0820 0819 0818 0817 0816 0815 0814 0813 0812 0811 0810 0809 0808 0807 0806 0805 0804 0803 0802 0801 0800 0799 0798 0797 0796 0795 0794 0793 0792 0791 0790 0789 0788 0787 0786 0785 0784 0783 0782 0781 0780 0779 0778 0777 0776 0775 0774 0773 0772 0771 0770 0769 0768 0767 0766 0765 0764 0763 0762 0761 0760 0759 0758 0757 0756 0755 0754 0753 0752 0751 0750 0749 0748 0747 0746 0745 0744 0743 0742 0741 0740 0739 0738 0737 0736 0735 0734 0733 0732 0731 0730 0729 0728 0727 0726 0725 0724 0723 0722 0721 0720 0719 0718 0717 0716 0715 0714 0713 0712 0711 0710 0709 0708 0707 0706 0705 0704 0703 0702 0701 0700 0699 0698 0697 0696 0695 0694 0693 0692 0691 0690 0689 0688 0687 0686 0685 0684 0683 0682 0681 0680 0679 0678 0677 0676 0675 0674 0673 0672 0671 0670 0669 0668 0667 0666 0665 0664 0663 0662 0661 0660 0659 0658 0657 0656 0655 0654 0653 0652 0651 0650 0649 0648 0647 0646 0645 0644 0643 0642 0641 0640 0639 0638 0637 0636 0635 0634 0633 0632 0631 0630 0629 0628 0627 0626 0625 0624 0623 0622 0621 0620 0619 0618 0617 0616 0615 0614 0613 0612 0611 0610 0609 0608 0607 0606 0605 0604 0603 0602 0601 0600 0599 0598 0597 0596 0595 0594 0593 0592 0591 0590 0589 0588 0587 0586 0585 0584 0583 0582 0581 0580 0579 0578 0577 0576 0575 0574 0573 0572 0571 0570 0569 0568 0567 0566 0565 0564 0563 0562 0561 0560 0559 0558 0557 0556 0555 0554 0553 0552 0551 0550 0549 0548 0547 0546 0545 0544 0543 0542 0541 0540 0539 0538 0537 0536 0535 0534 0533 0532 0531 0530 0529 0528 0527 0526 0525 0524 0523 0522 0521 0520 0519 0518 0517 0516 0515 0514 0513 0512 0511 0510 0509 0508 0507 0506 0505 0504 0503 0502 0501 0500 0499 0498 0497 0496 0495 0494 0493 0492 0491 0490 0489 0488 0487 0486 0485 0484 0483 0482 0481 0480 0479 0478 0477 0476 0475 0474 0473 0472 0471 0470 0469 0468 0467 0466 0465 0464 0463 0462 0461 0460 0459 0458 0457 0456 0455 0454 0453 0452 0451 0450 0449 0448 0447 0446 0445 0444 0443 0442 0441 0440 0439 0438 0437 0436 0435 0434 0433 0432 0431 0430 0429 0428 0427 0426 0425 0424 0423 0422 0421 0420 0419 0418 0417 0416 0415 0414 0413 0412 0411 0410 0409 0408 0407 0406 0405 0404 0403 0402 0401 0400 0399 0398 0397 0396 0395 0394 0393 0392 0391 0390 0389 0388 0387 0386 0385 0384 0383 0382 0381 0380 0379 0378 0377 0376 0375 0374 0373 0372 0371 0370 0369 0368 0367 0366 0365 0364 0363 0362 0361 0360 0359 0358 0357 0356 0355 0354 0353 0352 0351 0350 0349 0348 0347 0346 0345 0344 0343 0342 0341 0340 0339 0338 0337 0336 0335 0334 0333 0332 0331 0330 0329 0328 0327 0326 0325 0324 0323 0322 0321 0320 0319 0318 0317 0316 0315 0314 0313 0312 0311 0310 0309 0308 0307 0306 0305 0304 0303 0302 0301 0300 0299 0298 0297 0296 0295 0294 0293 0292 0291 0290 0289 0288 0287 0286 0285 0284 0283 0282 0281 0280 0279 0278 0277 0276 0275 0274 0273 0272 0271 0270 0269 0268 0267 0266 0265 0264 0263 0262 0261 0260 0259 0258 0257 0256 0255 0254 0253 0252 0251 0250 0249 0248 0247 0246 0245 0244 0243 0242 0241 0240 0239 0238 0237 0236 0235 0234 0233 0232 0231 0230 0229 0228 0227 0226 0225 0224 0223 0222 0221 0220 0219 0218 0217 0216 0215 0214 0213 0212 0211 0210 0209 0208 0207 0206 0205 0204 0203 0202 0201 0200 0199 0198 0197 0196 0195 0194 0193 0192 0191 0190 0189 0188 0187 0186 0185 0184 0183 0182 0181 0180 0179 0178 0177 0176 0175 0174 0173 0172 0171 0170



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FL614

Fine Fiber on the THC System
160 F at 100% RH

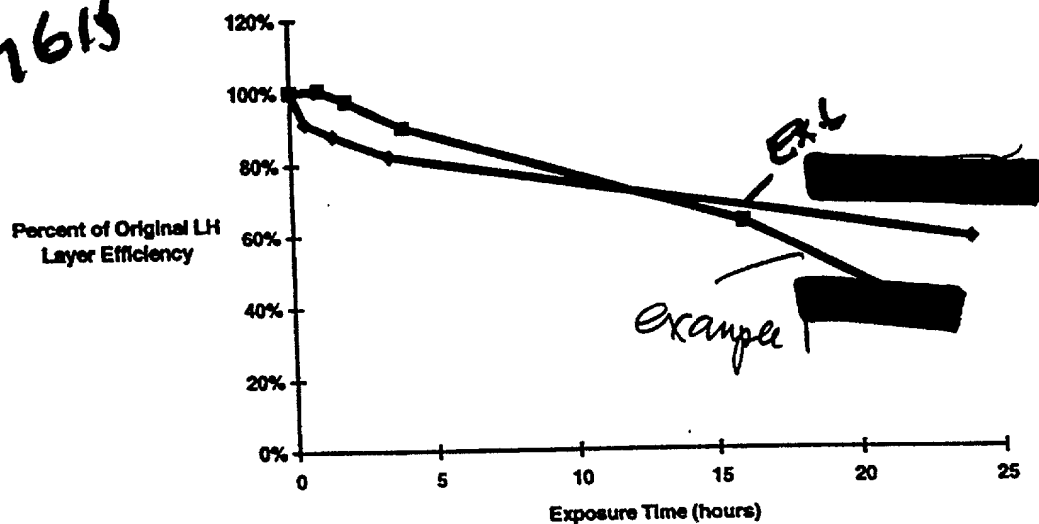


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+1
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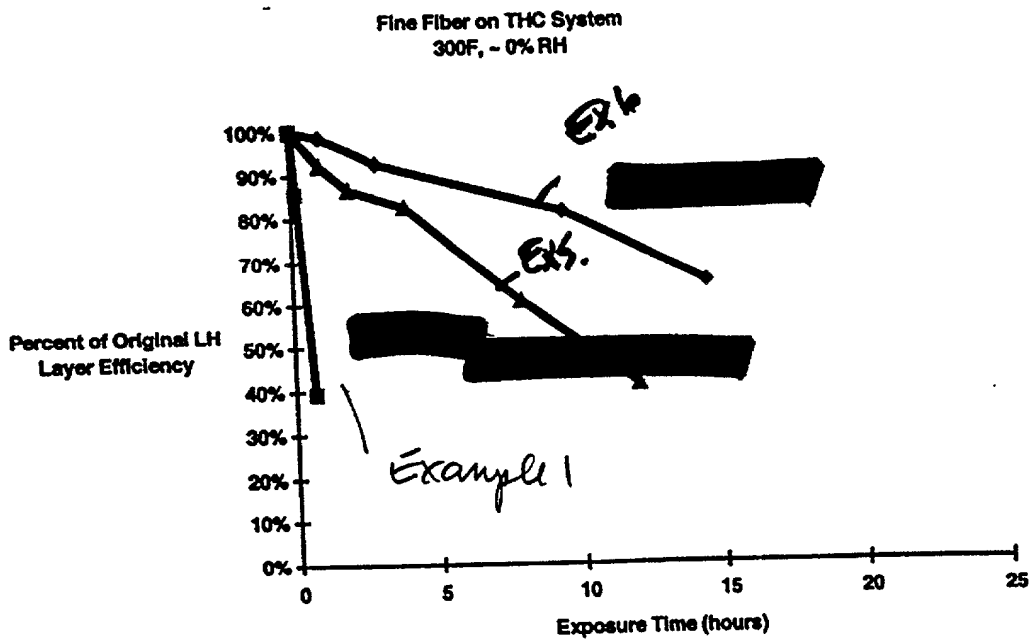
F1615

Fine Fiber on THC System
250F, ~ 0% RH



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Fig 16



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12 Me H

Sample: 1191-19C-6

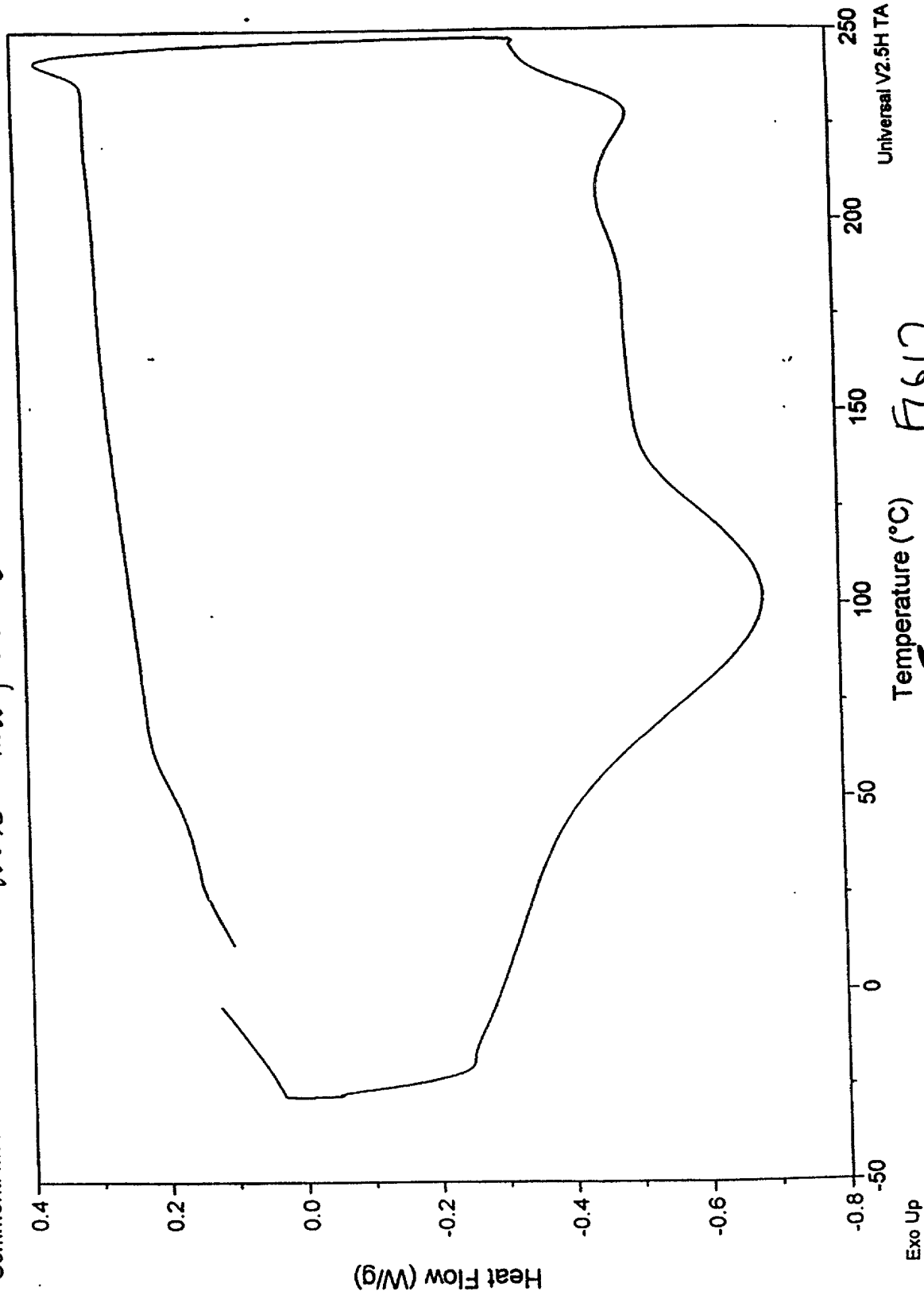
Size: 9.1500 mg

Method: Polymer Samples

Comment: Material characterization

DSC nylon

100% modified 66



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Universal V2.5H TA Instruments

FL617

10750" 69TT2860

Sample: 1191-19C-6

Size: 9.1500 mg

Method: Polymer Samples

Comment: Material characterization

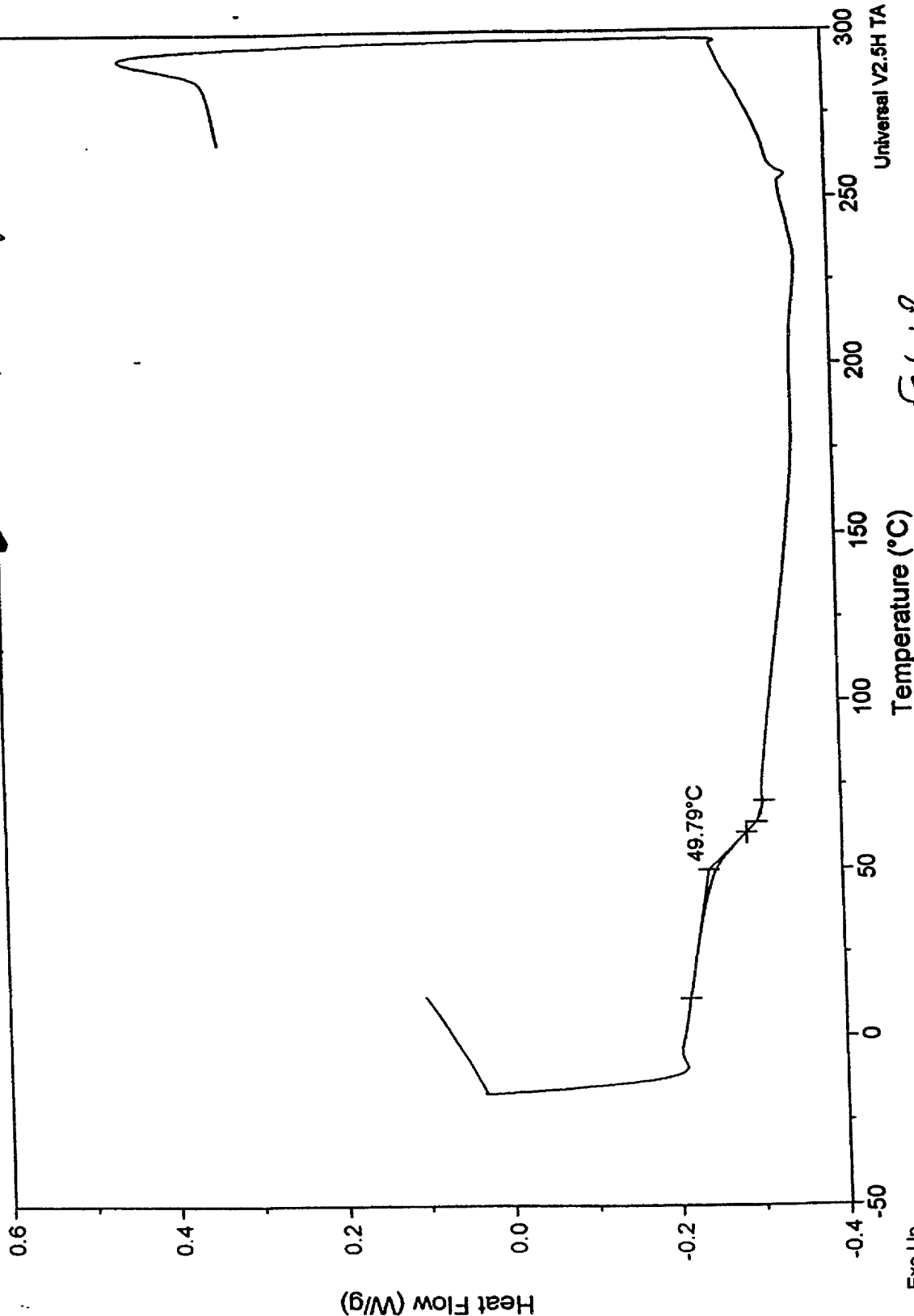
2nd Melt

DSC

nylon

100% modified

66 - After Fully Cross-Linked



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TOTESTO" 69T 2850

Sample: 1191-19C-7

Size: 9.8400 mg

Method: Polymer Samples

Comment: Material characterization

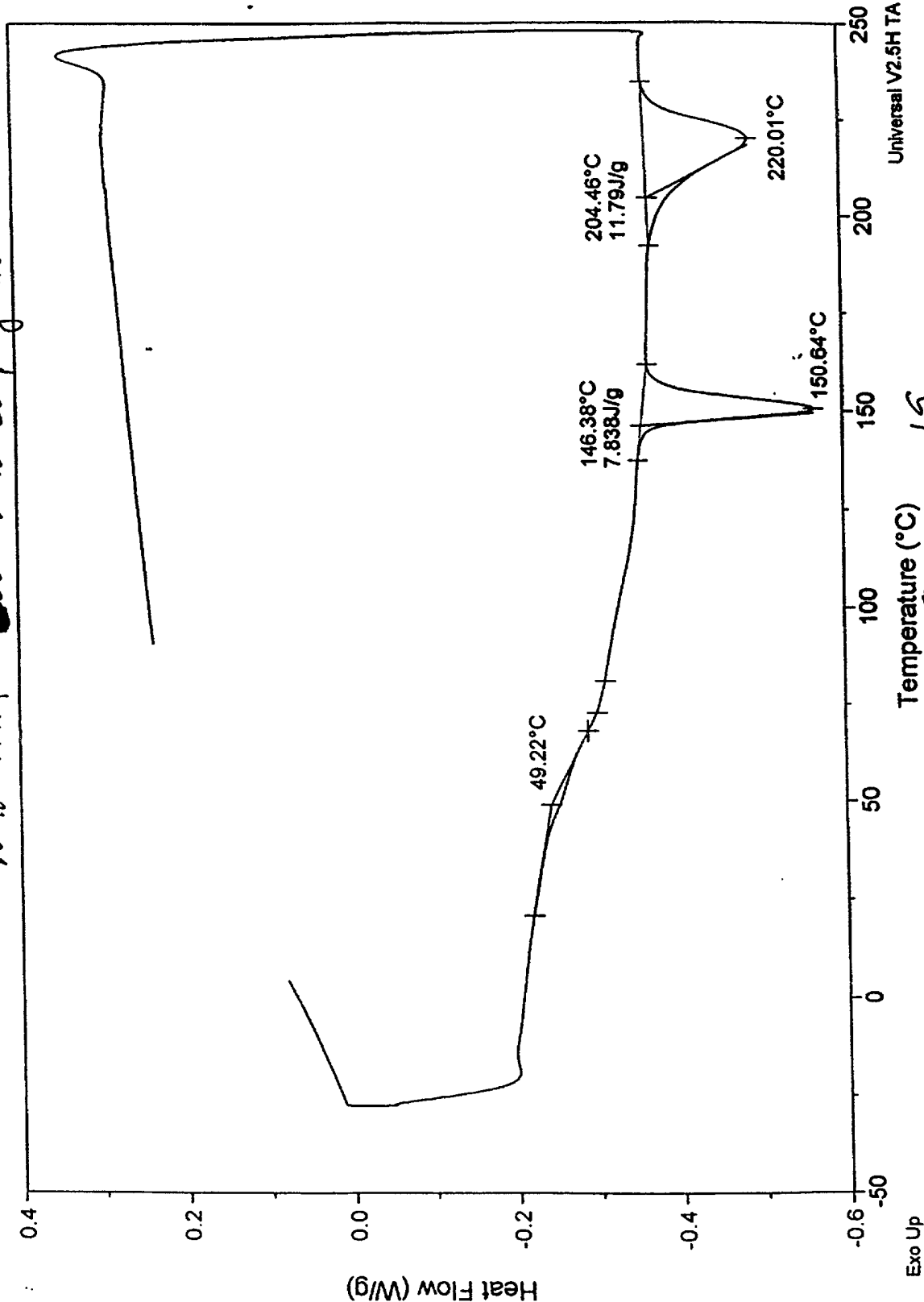
Example 6

70% mol-fail 66: 30% co-polyamide

1st Melt

DSC

mlm



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FOI 50 6974860

Sample 6 2nd melt
DSC

Sample: 1191-19C-7

Size: 9.8400 mg

Method: Polymer Samples

Comment: Material characterization

70:30

after Full Cross-linking

Heat Flow (W/g)

0.6

0.4

0.2

0.0

-0.2

-0.4

Exo Up

42.83°C

150

Temperature (°C)

200

Fig 20

250

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FIG. 21

FIG. 21

